

Amendments to the Specification:

Please replace paragraph [0015] with the following amended paragraph:

A1 [0015] Figure 1 is a schematic view of the process of manufacture of the rice straw panel of the present invention. invention; and

Please add the following new paragraph after paragraph [0015]:

A2 [0015.1] Figure 2 is an exploded isometric view of a door assembly according to one embodiment of the present invention.

Please replace paragraphs [0031] – [0033] with the following amended paragraphs:

A3 [0031] The panels thus manufactured can be used either independently, as represented by block 30, or incorporated into a fire-retardant door 100, as represented by blocks 26 and 28 and depicted in the exploded isometric view of Figure 2. One embodiment of a panel 104 useful in fire-retardant doors 100 has a thickness of approximately 1.5 inches. Panels 104 used for general construction and other applications tend to be thinner, in certain embodiments approximately 0.1 inches to 0.25 inches. An additional general distinction between the rice straw panels 104 used for miscellaneous applications as compared to rice straw panels 104 used in fire doors 100 is that the rice straw panels 104 used in fire doors 100 may not require the addition of an organic phosphate or borates (zinc borate and/or boric acid), sodium silicates, aluminum trihydrate, or even rice hulls in order to achieve desired levels of fire retardancy.

[0032] As represented in Figure 1 by block 26 and depicted in Figure 2, the rice straw fire door cores 104 of the present invention can be assembled into doorframes 102 made of a fire-resistant material, for example, TECTONITE™ which is manufactured by and available from Warm Springs Composite Products of Warm Springs, Oregon, U.S.A. Any one of a variety of other materials commonly used in the construction industry in fire-resistant applications would also be suitable for manufacture of the doorframes 102. In other embodiments, the fire doors 100 may include one or more door skins 106 disposed on one or more surfaces of the fire door 100, as represented in Figure 1 by block 28. The door skins 106 may be constructed from any of the materials commonly used in the construction of fire doors 100.

[0033] As manufactured and assembled as described above, certain embodiments of fire doors 100 according to the present invention have been demonstrated to exhibit a level of fire retardance sufficient to qualify as 45-minute, 60-minute and 90-minute doors, levels which are well above that traditionally associated with cellulose-based fire doors. Additionally, certain embodiments of fire retardant panels 104 according to the present invention have been shown to exhibit a level of performance sufficient to qualify as Class 1 fire retardant materials, which is higher than that traditionally associated with cellulose-based materials.